

DETAILED ACTION
EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeffery Filipek on 10/23/2008.

The application has been amended as follows:

In the response to election/restriction "claims 1 to 22 and 24" change to - - claims 14-22 and 24- -.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 14-15, 18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suhara et al. (US 5,953,204) in view of the Japanese Patent (JP02000286167A) (167A).

Regarding claim 14, Suhara et al. disclose a coin-shaped storage cell (figure 1) comprising:

- a pair of polarizable electrodes (5);
- an insulating separator (8) which is interposed between the polarizable electrodes;
- an electrolytic solution (7) which is impregnated in the polarizable electrode pair and the separator;
- a metal case (3) for housing the polarizable electrode pair; an insulating ring packing (9) which is disposed inside the metal case; and
- a top lid (4) which is integrally caulked with the metal case via the ring packing.

Suhara et al. disclose all the claimed limitation discussed above with respect to claim 14, except for the metal case include an inner bottom surface formed with asperities.

The Japanese Patent (167A) teaches a collector having a surface provided with asperities.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the assembly of the Japanese Patent in to Suhura et al. in order to provide high heat resistance and prevent leakage of the solution.

Regarding claim 15, the teaching of Suhura in view of the Japanese Patent includes all the claimed limitation discussed above with respect to 14. It would have been obvious that the teaching of the Japanese Patent having an asperities are formed by satin finish.

With respect to claim 18, the teaching of Suhura in view of the Japanese Patent includes all the claimed limitation discussed above with respect to 14. It would have been obvious that the teaching of the Japanese Patent having the asperities being formed over an entire area on the inner bottom surface of the metal case.

Regarding claim 24, Suhura et al. disclose the top lid and the metal case have respective outer surfaces thereof to be connectable with external terminals each in the shape of a substantially triangular shape.

Allowable Subject Matter

Claims 16-17 and 19-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claim 16, the prior art alone or in combination does not teach the limitation of the asperities are in the form of a plurality of concentric circular rings, the asperities being formed by making the center of the circular rings and the center of the inner bottom surface of the metal case in agreement with each other.

With respect to claim 17, the prior art alone or in combination does not teach the limitation of the asperities are formed only on an area of the inner bottom surface of the metal case where the metal case opposes the ring packing.

With respect to claims 19-20, the prior art alone or in combination does not teach the limitation of a sealing auxiliary member which is interposed between the metal case and the ring packing, wherein the sealing auxiliary member is provided only at such an area as to substantially cover the asperities on the inner bottom surface of the metal case.

With respect to claims 21-22, the prior art alone or in combination does not teach the limitation of a first annular bulging portion which is integrally formed with an outer periphery of the metal case, the first annular bulging portion protruding toward the ring packing, wherein the first annular bulging portion is located above an end portion of a bent portion of the top lid.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGUYEN T. HA whose telephone number is (571)272-

1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nguyen T Ha/
Primary Examiner, Art Unit 2831